

BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: 8/18/04

Division: Public Safety

Bulk Item: Yes ☒ No

Department: Solid Waste Management

AGENDA ITEM WORDING: Approval of a Purchase/Service Order (PSO) with SCS Engineers to enable the completion of the renewal permitting process for the Cudjoe Key Lined Landfill.

ITEM BACKGROUND: An application for a renewal operating permit was sent to the Department of Environmental Protection. That agency requested the completion of the several items outlined in the PSO before considering the renewal. SCS Engineers will carry out the required testing and certifications.

PREVIOUS RELEVANT BOCC ACTION: Approval to advertise a Request for Qualifications (RFQ) for General Consulting Engineer Services on 4/21/04. Approval to negotiate a contract was given on 7/23/04. Approval, at today's meeting, of the contract with SCS Engineers.

CONTRACT/AGREEMENT CHANGES: N/A

STAFF RECOMMENDATIONS: Approval

TOTAL COST: \$27,600.00 approximately

BUDGETED: Yes ☒ No

COST TO COUNTY: \$27,600.00 approximately

SOURCE OF FUNDS: Solid Waste assessments and tipping fees

REVENUE PRODUCING: Yes No ☒

AMOUNT PER MONTH Year

APPROVED BY: County Atty N/A /OMB/Purchasing N/A /Risk Management N/A

ITEM PREPARED BY:

Carol A. Cobb 8/13/04
Carol A. Cobb, Sr. Administrator Solid Waste Management

DIVISION DIRECTOR APPROVAL:

James R. "Reggie" Pares 8/2/2004
James R. "Reggie" Pares

DOCUMENTATION: Included ☒ To Follow

Not Required

DISPOSITION:

AGENDA ITEM # C16

Revised 1/03

SCS ENGINEERS

July 29, 2004
File No. 9125203

AUG 2 2004

Carol A. Cobb
Senior Administrator
Solid Waste Management Department
Monroe County, Florida
1100 Simonton Street, Room 2-284
Key West, Florida 33040

Re: Proposal to Collect FDEP Requested Information
Cudjoe Key Landfill – FDEP Application No. 0067347-003-SO
Monroe County, Florida

Dear Ms. Cobb:

SCS Engineers (SCS) is pleased to submit the following proposal to the Monroe County Solid Waste Department (County) for providing professional engineering services to assist the County with responding to a November 21, 2002 Request for Additional Information (RAI) from the Florida Department of Environmental Protection (FDEP). The RAI was forwarded to the County as part of the current ongoing operations permit renewal effort for the Cudjoe Key Landfill located in Monroe County, Florida.

After reviewing the RAI letter and following a January 27, 2004 meeting between SCS, the County and FDEP, SCS has prepared the following outline of tasks and services required to assist in preparation of a response letter to the FDEP.

Task 1 – Collection of FDEP Requested Information

RAI Item No. 1 – FDEP requested that the Cudjoe Key Lined cell be cleared of vegetative growth, standing water removed from the cell, and graded to ensure the 2-foot protective cover soil is in-place.

To address the RAI comment, we understand that the County will comply with the request and remove the vegetation and pump out the standing water from the cell. SCS has assumed the County will provide all labor and equipment necessary to complete FDEP's request. SCS will make a site visit to observe the condition of the cell and to document for FDEP that the County has complied with FDEP's request.

RAI Item No. 2 – FDEP requested the County demonstrate that the lined cell meets the requirements that were effective (per Rule 17-7.050, F.A.C., dated 1985) for lined areas.

SCS has received preliminary information from the County from the original construction certification documents for the cell. Based on the documents it appears that the cell was constructed to meet the Rules that were effective at the time of the cell construction. To address the RAI comment, SCS will coordinate with the County to review the construction



certification report, prepared by others, for the lined area of the Cudjoe Key Landfill. SCS will travel to the County's office to retrieve the information and assemble the information in the response package to be submitted to FDEP. We understand that the County will prepare a letter outlining the operational history of the lined cell area that indicates no construction activities or excavations have occurred since the cell was constructed or a detailed description of any such activities.

In addition, SCS will perform two soil permeability tests per cell (eight tests total) on the soil/ash drainage layer to determine if vegetation sedimentation from runoff from the adjacent closed cell has affected the soil's permeability.

RAI Item No. 3 – FDEP requested the County submit a letter from the original liner manufacturer stating that the liner is still under warranty.

SCS has limited our time on this issue because as was discussed in our January 24, 2004 meeting with FDEP, whether or not the geomembrane has a warranty should not be an issue, since at the time of construction the geomembrane had a warranty.

RAI Item No. 4 – FDEP requested the County submit a damage report for all exposed liner materials. All repairs are to be conducted in accordance with the Quality Assurance/Quality Control (QA/QC) Plan previously submitted for the cell construction.

During a site visit previously conducted by SCS on August 15, 2003, no obvious geomembrane was exposed. SCS had discussions with Mr. Jack Julian with the County and he indicated no geomembrane was exposed. It is SCS's understanding that no geomembrane is or has been exposed or damaged since construction. If repairs have been made, then repair documentation should have been forwarded to the County. SCS is requesting that the County include in its letter about the history of the cell a statement that no geomembrane has been exposed or repaired since construction of the cell. The letter should be sufficient to demonstrate to FDEP that the cell has not changed since construction. Should documentation on previous repairs not be available or should repairs be required, SCS will prepare a separate proposal to oversee repairs.

RAI Item No. 5 – FDEP requested the leachate collection be video inspected or pressure tested.

SCS reviewed the leachate collection pipelines during the previous site visit and determined access could possibly be made by placing a video camera in the lift stations or cleanouts and then pushed into the leachate pipeline.

SCS has coordinated with a firm that specializes in video taping pipelines. The selected subcontractor will jetclean the 6-inch leachate collection lines prior to video taping the pipelines. The 6-inch collection pipes and access through the lift stations does not allow mechanical video equipment to be used. Therefore, the video equipment will be pushed into the pipelines. Any damaged or debris within the pipeline may not allow the pipeline to be

video taped along its entire length. SCS will provide an on-site inspector to observe the video taping and jetcleaning services. This task is expected to take approximately one working day to complete based on the assumption that excessive debris or damaged pipelines are not encountered that may require additional time to remove.

SCS has not included the costs associated with a vacuum truck or any other removal equipment or activities associated with excess sedimentation that may accumulate in the lift stations due to the jetcleaning services. The County will provide all of the equipment and personnel necessary to remove the accumulated material.

In order to perform the jetcleaning services, SCS is requesting the County perform the following services prior to SCS's and the jetclean subcontractor's arrival onsite. Per the conversation between SCS and Mr. Julian on March 2, 2004, at least 5,000 gallons of water must be readily available onsite at the arrival time of SCS and the jetclean subcontractor. This water must be located in an area, preferably in the leachate storage tank(s), where the jetclean truck can transfer the water into a 600-gallon watertank for use in jetcleaning the leachate pipelines. In addition, the County will provide all of the equipment (pumps, hoses, etc.) to transfer the water into the jetclean watertank. The pump hose can be placed through the top of the jetclean watertank and the watertank can be filled by connecting a hose to the 2-inch camlock on the truck. SCS can provide additional information regarding the jetclean watertank if requested by the County.

Upon completion of the video-taped inspection, the subcontractor will prepare an inspection report and supply a VHS tape of the inspection.

RAI Item No. 6 – FDEP requested a test be performed on the lined area to determine leakage rates.

This testing is not typically required for lined cells that have been previously certified. Based on our January 27, 2004 meeting with FDEP, the principal concern is with the condition of the sand drainage layer, not the liner, so the permeability testing outlined in the responses to RAI Item No. 2 should be sufficient.

RAI Item No. 7 – FDEP requested the County provide inspection reports for the lined area, pumps, scales, and tanks.

During a site visit previously conducted by SCS on August 15, 2003, SCS observed that the pumps in the two on-site pump stations were active and pumping stormwater from the lined cell. No panel controls were tested at the time of the site visit. SCS observed the leachate storage tank area and piping, however the control panel was locked at the time of the inspection. In discussions with Mr. Julian, it has been a long time since the leachate forcemain, leading from the cell to the tanks, has been operated.

Per Rule 62-701.400(6), FAC, all above ground leachate surface tanks and equipment shall be inspected to ensure proper operations. Therefore, to supply FDEP with the requested RAI item, SCS will do the following:

- For SCS to perform the required field services expeditiously thereby generating a cost savings to the County, SCS is requesting the County fill both of the lift stations with water prior to SCS's arrival onsite. Upon arrival of SCS, the County will operate both of the lift stations pumps (two pumps per lift station) in order to activate the lead pump on, lag pump on, high level alarm, and all pumps off, float switches. The County will provide sufficient supply of water onsite and the equipment necessary to pump enough water from the lift stations, through the leachate forcemain and into the leachate storage tank from the farthest lift station for at least two full cycles of the lift station. During the cycling of the pumps, SCS will traverse the leachate forcemain looking for potential leaks.
- The County will activate the control panel during cycling of the pumps to check for proper operation of the systems components (valves, pumps, alarms etc.).
- In addition, the County must demonstrate to SCS that the high water level alarm on the leachate storage tank is functional and operating properly, either by manually controlling the high water level alarm on the control panel, or if necessary, cycling enough water into the tank to automatically activate the alarm.
- The County must demonstrate that the valves, piping, pumps, etc. that are associated with either draining and or pumping of the leachate storage tank into transfer vehicles are in proper working order.
- The County must also demonstrate that the secondary containment unit around the leachate storage tank is in proper working condition. SCS will perform a visual inspection of the containment area. If cracking is observed, the containment area may need to be filled with water supplied by the County. The containment area will be observed to determine if the water level is lowering.

SCS has assumed that County personnel are familiar with the panels, values, alarms, and all operations of the system. SCS has included no time to read operations manuals or in-field assistance with inoperable systems. SCS will provide up to two days of on-site inspection services to observe the operating condition of the pumps, control panel, lines and tanks.

The scales are assumed to be calibrated on a regular basis, and the calibration report from the inspector of the scales will be sufficient. The calibration reports should be sufficient to demonstrate to FDEP that the scales are operating properly.

Ms. Carol Cobb, Senior Administrator
July 29, 2004
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Task 2 – Prepare Response Submittal to FDEP

SCS will coordinate with the various subcontractors identified to obtain final reports or testing results. SCS will review the reports submitted by the subcontractors for completeness with the scope of services that will be prepared by SCS. SCS will prepare a draft letter response to FDEP, including the subcontractor reports, for review by the County. A final version will be prepared in response to any County comments, for submittal to FDEP. Requests for additional information made by the FDEP beyond the submittal outlined above is not included in this proposal.

Task 3 – Miscellaneous Engineering Services

SCS can provide additional engineering services for items not specifically outlined in this proposal, if requested on a time and materials basis.

BUDGET

SCS will complete the scope of services described above for a lump sum fee of \$27,600, in accordance with the terms of our master agreement with the County. This fee includes the subcontractors' costs for the permeability tests of the sand drainage layer and the video inspection of the leachate collection system.

SCHEDULE

On approval of this proposal by the County, SCS will coordinate with the County and the various subcontractors involved to establish a preliminary schedule for completing the requested information from FDEP as stated in Task 1 and Task 2. SCS anticipates the above scope can be scheduled and completed within approximately 30 days after notice to proceed has been received by SCS. If this proposal is acceptable, please have the attached Purchase/Service Order Number 1 executed and returned to SCS.

Sincerely,



Joseph H. O'Neill, P.E.
Project Manager
SCS ENGINEERS



Raymond J. Dever, P.E., DEE
Vice President
SCS ENGINEERS

cc: Reggie Paros

Attachment

**PURCHASE/SERVICE ORDER PURSUANT TO AGREEMENT BETWEEN
MONROE COUNTY AND SCS ENGINEERS FOR
GENERAL SOLID WASTE CONSULTING ENGINEER SERVICES**

PURCHASE/SERVICE ORDER NUMBER 1

1. PROJECT NAME: Responses to FDEP for Cudjoe Key Landfill Operations Permit Renewal

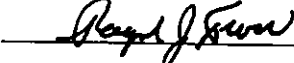
2. SCOPE OF SERVICES TO BE PERFORMED: See attached SCS proposal dated July 29, 2004

3. DAYS TO COMPLETE: 30


4. LUMP SUM FEE THIS PURCHASE/SERVICE ORDER \$27,600

4. AGREEMENT BY THE PARTIES: The parties have caused this Purchase/Service Order to be executed by their duly authorized representatives.

SCS ENGINEERS:

By: 
Print Name: Raymond J. Dever, P.E.
Title: Vice President
Date: 7/29/04

MONROE COUNTY:

Recommended By: 
Print Name: James R. "Reggie" Paros
Title: Division Director
Date: August 5, 2004
Approved By: _____
Print Name: _____
Title: _____
Date: _____

MANPOWER AND FEE ESTIMATE
Response to FDEP RAI dated Nov 21, 2002 - Cudjoe Key Landfill - Lined Cells
MONROE COUNTY, FLORIDA

Proposal Number 9125203

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Personnel	Task No 1							Task No 2		Task No. 3		Total (hours)	Rate (\$)	Total (\$)
	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7		2	3					
Office Director/Advisor	2					2		3				7	145	1,015
Project Director												0	145	0
Senior Project Manager												0	125	0
Project Manager	8	8		20		16		24				76	115	8,740
Senior Project Professional								8				8	93	744
Senior Superintendent												0	87	0
Project Professional	16							30				46	82	3,772
Designer								6				6	72	432
O&M Superintendent												0	67	0
Staff Professional								10				10	67	670
Senior Technician												0	62	0
Associate Staff Professional												0	55	0
Draftsperson												0	50	0
Technician												0	47	0
Office Service Manager												0	52	0
Secretarial/Clerical	4					1		10				15	42	630
Subtotal Labor (hours)	30	8	0	20	2	17		91				168		
Subtotal Labor (\$)	2,690	920	0	2,300	290	1,882		7,921						16,003
Reimbursables	115	0	4,800	5,020	25	30		544				0		10,534
G&A, % percent reimbursables 10.0%	12	0	480	502	3	3		54				0		1,053
Total, Fee Estimate	\$2,817	\$920	\$5,280	\$7,822	\$318	\$1,915		\$8,519				\$0		\$27,590

Note(s):

Task 1 - Collection of FDEP RAI No. 1 Information

Task 2 - Prepare Responses to FDEP

ITEM 2 Cell meets FDEP design

ITEM 6 Leak Testing

Task 3 - Miscellaneous Engineering Services

ITEM 3 Warranty

ITEM 7 Tank Inspections

ITEM 4 QA/QC Report

ITEM 5 Video Inspection

MANPOWER AND FEE ESTIMATE

Response to FDEP RAI dated Nov 21, 2002 - Cudjoe Key Landfill - Lined Cells

MONROE COUNTY, FLORIDA

REIMBURSABLE COSTS

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Reimbursable	Unit Cost (\$)	Unit									Total Units	Total (\$)
			Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	2	3		
Drillers	1	ls	0	0	4,800	0	0	0	0	0	4,800	4,800
JetClean - Video pipes	1	ls	0	0	0	5,000	0	0	0	0	5,000	5,000
I.C. Pegus Leak Detection Srv	1	ls	0	0	0	0	0	0	0	0	0	0
Geomembrane Samples	250	each	0	0	0	0	0	0	0	0	0	0
Vehicle Mileage (Auto)	0.33	mile	0	0	0	0	0	0	0	0	0	0
Airfare TPA/MIA	0	each	0	0	0	0	0	0	0	0	0	0
Rental Car	0	day	0	0	0	2	0	2	0	0	4	0
Rental Car Fuel	0	day	0	0	0	2	0	2	0	0	4	0
Parking & Tolls	10	day	0	0	0	2	0	2	0	0	4	40
Destructive samples	30	each	0	0	0	0	0	0	0	0	0	0
Meal Per Diem	0	day	0	0	0	2	0	2	0	0	4	0
Lodging, Hotel	0	day	0	0	0	2	0	2	0	0	4	0
Telephone Calls	5	each	3	0	0	0	3	0	5	0	15	75
Faxes	6	each	0	0	0	0	0	0	8	0	8	48
Postage & Freight	25	ls	2	0	0	0	0	0	2	0	4	100
Reproduction (Xerox)	0.10	each	0	0	0	0	0	0	2,000	0	2,000	200
Reproduction (Graphics)	3	each	0	0	0	0	0	0	0	0	0	0
CAD plots (24x36)	4	each	0	0	0	0	0	0	0	0	0	0
CAD plots (11x17)	0.4	each	0	0	0	0	0	0	0	0	0	0
CAD plots (8x11)	0.1	each	0	0	0	0	0	0	10	0	10	1
Computer (CAD)	20	hour	0	0	0	0	0	0	6	0	6	120
Computer (Secretarial)	10	hour	4	0	0	0	0	1	10	0	15	150